



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,381	05/30/2001	Mazen Chmaytelli	010043	9855
23696	7590	12/13/2005	EXAMINER	
QUALCOMM, INC 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			LAZARO, DAVID R	
			ART UNIT	PAPER NUMBER
			2155	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/871,381

Applicant(s)

CHMAYTELLI ET AL

Examiner

David Lazaro

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-10 and 20-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 20-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/2/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to the amendment filed 11/02/2004.
2. Claims 1, 24, 27, 28, 38, 44 and 45 were amended.
3. Claims 1-4, 6-10 and 20-45 are pending in this office action.

### ***Response to Amendment***

4. Applicant's arguments, see Remarks, filed 11/02/2004, with respect to the rejection(s) of claim(s) 1-4, 6-10 and 20-45 have been fully considered and are persuasive. Particularly, the examiner agrees that the Barrett reference does not teach the "server" measuring one or more data transfer rates. Upon further consideration, a new ground(s) of rejection is made.

### ***Claim Rejections - 35 USC § 112***

5. Claims 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 7-10 each recite the limitation "the calculated data transfer". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 6 and 24-27 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,908,467 by Barrett et al. (Barrett) in view of U.S. Patent 5,968,132 by Tokunaga et al. (Tokunaga).

9. With respect to Claim 1, Barrett teaches a method for estimating a length of time required to download one or more application programs onto a wireless device over a wireless network (Col. 2 lines 26-35, Col. 4 lines 45-55 and Col. 8 lines 42-50 - the invention is directed towards the internet environment which is described as a composite network including wireless transmission mediums. As such, the apparatus taught by Barrett would include wireless devices capable of receiving wireless transmissions.), said method comprising operations of:

the wireless device exchanging one or more data files with a server, said data files including at least information representing a size of the one or more application programs available for downloading onto the wireless device (Col. 5 lines 42-67 - test messages and responses are exchanged, the responses may indicate the size of available programs. Note that Col. 4, lines 45-55, discusses the alternate embodiment of remotely stored application programs.);

during the exchanging, measuring one or more data transfer rates for the exchanging operation (Col. 5 lines 42-63)

receiving user input of one or more application programs to download (Col. 5 lines 4-10);

at least one of the server and wireless device:

utilizing the one or more measured data transfer rates and the size of the selected one or more application programs to estimate a length of time required to download the one or more application programs onto the wireless device (Col. 5 lines 42-67)

and the wireless device providing an output of the estimated time (Col. 6 lines 1-2).

Barrett does not explicitly disclose that during the exchanging, the server is responsible for measuring one or more data transfer rates for the exchanging operation. Tokunaga teaches a server can send exchange data files with a receiving device and can measure a data transfer rate for the exchanging operation (Col. 14 line 53 - Col. 15 line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett and modify it as indicated by Tokunaga such that the method further comprises during the exchanging, the server measuring one or more data transfer rates for the exchanging operation. One would be motivated to have this, as Barrett describes download times are influenced by the

Art Unit: 2155

amount of traffic between a user and remote server (Col. 5 lines 38-41) and Tokunaga provides a more accurate measurement of such influence (Col. 15 lines 16-19).

10. With respect to Claim 2, Barrett in view of Tokunaga teaches all the limitations of Claim 1, and further teaches the wireless device sending one or more requests to the server to obtain the data files from the server (In Barrett: Col. 5 lines 4-23).

11. With respect to Claim 3, Barrett in view of Tokunaga teaches all the limitations of Claim 1, and further teaches the data files containing information describing the one or more application programs available for download onto the wireless device (In Barrett: Col. 5 lines 64-66).

12. With respect to Claim 6, Barrett in view of Tokunaga teaches all the limitations of Claim 1 and further teaches, the measuring operation comprising operations of: the wireless device notifying the server immediately upon completion of the downloading of each of the one or more data files (In Tokunaga: Col. 15 lines 3-15); and in response, the server dividing a size of each of the one or more data files by a length of time between the server sending each data file to the wireless device, and the wireless device notifying the server of the completed download (In Tokunaga: Col. 15 lines 3-19).

13. With respect to Claim 24, Barrett teaches an information exchange system comprising:

one or more wireless devices programmed to perform operations over a wireless network (Col. 2 lines 26-35, Col. 4 lines 45-55 and Col. 8 lines 42-50 - the invention is directed towards the internet environment which is described as a composite network including wireless transmission mediums. As such, the apparatus taught by Barrett

would include wireless devices capable of receiving wireless transmissions.)

comprising :

exchanging one or more data files with a server, said data files including at least information representing a size of one or more application programs available for downloading onto the wireless device (Col. 5 lines 42-67 - test messages and responses are exchanged, the responses may indicate the size of available programs. Note that Col. 4, lines 45-55, discusses the alternate embodiment of remotely stored application programs.);

during the exchanging, measuring one or more data transfer rates for the exchanging operation (Col. 5 lines 42-63);

receiving user input of one or more application programs to download (Col. 5 lines 4-10);

utilizing the one or more measured data transfer rates and the size of the selected one or more application programs to estimate a length of time required to download the one or more application programs onto the wireless device (Col. 5 lines 42-67);

providing an output of the estimated time (Col. 6 lines 1-2);

and one or more servers, each server programmed to perform operations over a wireless network comprising:

exchanging the one or more data files with the wireless device (Col. 5 lines 42-67).

Barrett does not explicitly disclose that during the exchanging, the server is responsible for measuring one or more data transfer rates for the exchanging operation. Tokunaga teaches a server can send exchange data files with a receiving device and can measure a data transfer rate for the exchanging operation (Col. 14 line 53 - Col. 15 line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Barrett and modify it as indicated by Tokunaga such that the method further comprises during the exchanging, measuring, at the server, one or more data transfer rates for the exchanging operation. One would be motivated to have this, as Barrett describes download times are influenced by the amount of traffic between a user and remote server (Col. 5 lines 38-41) and Tokunaga provides a more accurate measurement of such influence (Col. 15 lines 16-19).

14. With respect to Claim 25, Barrett in view of Tokunaga teaches all the limitations of Claim 24, and further teaches the wireless device sending one or more requests to the server to obtain the data files from the server (In Barrett: Col. 5 lines 4-23).

15. With respect to Claim 26, Barrett in view of Tokunaga teaches all the limitations of Claim 25 and further teaches, the exchanging operation comprising operations of: the server initiating a transmission of the data files to the wireless device (In Tokunaga: Col. 14 line 53 - Col. 15 line 19).

16. With respect to Claim 27, Barrett teaches an information exchange system comprising:



wireless device means (Col. 2 lines 26-35, Col. 4 lines 45-55 and Col. 8 lines 42-50 - the invention is directed towards the internet environment which is described as a composite network including wireless transmission mediums. As such, the apparatus taught by Barrett would include wireless devices capable of receiving wireless transmissions.) for performing operations comprising :

exchanging one or more data files with a server, said data files including at least information representing a size of one or more application programs available for downloading onto the wireless device (Col. 5 lines 42-67 - test messages and responses are exchanged, the responses may indicate the size of available programs. Note that Col. 4, lines 45-55, discusses the alternate embodiment of remotely stored application programs.);

during the exchanging, measuring one or more data transfer rates for the exchanging operation (Col. 5 lines 42-63);

receiving user input of one or more application programs to download (Col. 5 lines 4-10);

utilizing the one or more measured data transfer rates and the size of the selected one or more application programs to estimate a length of time required to download the one or more application programs onto the wireless device (Col. 5 lines 42-67);

providing an output of the estimated time (Col. 6 lines 1-2);

and server means for performing operations comprising:

exchanging the one or more data files with the wireless device (Col. 5 lines 42-67).

Barrett does not explicitly disclose that during the exchanging, the server is responsible for measuring one or more data transfer rates for the exchanging operation. Tokunaga teaches a server can send exchange data files with a receiving device and can measure a data transfer rate for the exchanging operation (Col. 14 line 53 - Col. 15 line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Barrett and modify it as indicated by Tokunaga such that the method further comprises during the exchanging, measuring, at the server, one or more data transfer rates for the exchanging operation. One would be motivated to have this, as Barrett describes download times are influenced by the amount of traffic between a user and remote server (Col. 5 lines 38-41) and Tokunaga provides a more accurate measurement of such influence (Col. 15 lines 16-19).

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Tokunaga and U.S. Patent 6,928,468 by Leermakers (Leermakers).

18. With respect to Claim 4. Barrett in view of Tokunaga teaches all the limitations of Claim 1, but does not explicitly disclose the server transmitting the application programs for download onto the wireless device in response to operation of the wireless device to purchase the one or more application programs.

Leermakers teaches a wireless device, containing data related to one or more application programs available for download and their associated download times (Col. 5 line 63 - Col. 6 line 3), which transmits the application program for download in response to operation of the wireless device to purchase the application programs (Col. 6 lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett in view of Tokunaga and modify it as indicated by Leermakers such that the method further comprises the server transmitting the application programs for download onto the wireless device in response to operation of the wireless device to purchase the one or more application programs. One would be motivated to have this, as it is desirable to provide users with application programs as a consumer product/service (In Leermakers: Col. 2 lines 54-63 and Col. 6 lines 60-65).

19. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Tokunaga and U.S. Patent 6,832,239 by Kraft et al. (Kraft).

20. With respect to Claim 7, Barrett in view of Tokunaga teaches all the limitations of Claim 1, but does not explicitly disclose calculating an average data transfer rate by averaging all of the calculated data transfer rates; and dividing the size of the one or more selected application programs by the average data transfer rate.

The examiner takes official notice that calculating the average of a data set is a well known mathematical analysis technique.

Kraft teaches dividing the size of requested data by a data transfer rate in order to estimate a download time (Col. 6 lines 56 - Col. 7 line 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett in view of Tokunaga and modify it as indicated such that the method further comprises calculating an average data transfer rate by averaging all of the calculated data transfer rates; and dividing the size of the one or more selected application programs by the average data transfer rate. One would be motivated to use averaging as it is a well known analysis technique. One would be motivated to incorporate the teachings of Kraft as there is desire for providing users an accurate indication of download time (In Barrett: Col. 3 lines 48-60).

21. With respect to Claim 8, Barrett in view of Tokunaga teaches all the limitations of Claim 1, but does not explicitly disclose calculating a weighted data transfer rate by averaging all of the calculated data transfer rates, giving more weight to the data transfer rates calculated closer in time to the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the weighted data transfer rate.

The examiner takes official notice that calculating the weighted average of a data set is a well known mathematical analysis technique.

Kraft teaches dividing the size of requested data by a data transfer rate in order to estimate a download time (Col. 6 lines 56 - Col. 7 line 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett in view of Tokunaga and

modify it as indicated such that the method further comprises calculating a weighted data transfer rate by averaging all of the calculated data transfer rates, giving more weight to the data transfer rates calculated closer in time to the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the weighted data transfer rate. One would be motivated to use weighted averaging as it is a well known analysis technique. One would be motivated to incorporate the teachings of Kraft as there is a desire for providing users an accurate indication of download time (In Barrett: Col. 3 lines 48-60).

22. With respect to Claim 9, Barrett in view of Tokunaga teaches all the limitations of Claim 1, but does not explicitly disclose calculating a moving data transfer rate by averaging all of the calculated data transfer rates for a period of time immediately preceding the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the moving data transfer rate.

The examiner takes official notice that calculating the moving average of a data set is a well known mathematical analysis technique.

Kraft teaches dividing the size of requested data by a data transfer rate in order to estimate a download time (Col. 6 lines 56 - Col. 7 line 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett in view of Tokunaga and modify it as indicated such that the method further comprises calculating a moving data

transfer rate by averaging all of the calculated data transfer rates for a period of time immediately preceding the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the moving data transfer rate. One would be motivated to use moving averaging as it is a well known analysis technique. One would be motivated to incorporate the teachings of Kraft as there is desire for providing users an accurate indication of download time (In Barrett: Col. 3 lines 48-60).

23. With respect to Claim 10, Barrett in view of Tokunaga teaches all the limitations of Claim 1, but does not explicitly disclose calculating a moving weighted data transfer rate by averaging all of the calculated data transfer rates for a period of time immediately preceding the operation of the wireless device to select the one or more application programs for download and giving more weight to the calculated data transfer rates closer in time to the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the moving weighted data transfer rate.

The examiner takes official notice that calculating the moving weighted average of a data set is a well known mathematical analysis technique.

Kraft teaches dividing the size of requested data by a data transfer rate in order to estimate a download time (Col. 6 lines 56 - Col. 7 line 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Barrett in view of Tokunaga and modify it as indicated such that the method further comprises calculating a moving

weighted data transfer rate by averaging all of the calculated data transfer rates for a period of time immediately preceding the operation of the wireless device to select the one or more application programs for download and giving more weight to the calculated data transfer rates closer in time to the operation of the wireless device to select the one or more application programs for download; and dividing the size of the one or more selected application programs by the moving weighted data transfer rate. One would be motivated to use moving weighted averaging as it is a well known analysis technique. One would be motivated to incorporate the teachings of Kraft as there is desire for providing users an accurate indication of download time (In Barrett: Col. 3 lines 48-60).

24. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Tokunaga and Kraft.

25. With respect to Claim 20, Barrett teaches an information exchange system comprising:

one or more wireless devices programmed to perform operations over a wireless network comprising (Col. 2 lines 26-35, Col. 4 lines 45-55 and Col. 8 lines 42-50 - the invention is directed towards the internet environment which is described as a composite network including wireless transmission mediums. As such, the apparatus taught by Barrett would include wireless devices capable of receiving wireless transmissions.);

exchanging one or more data files with a server, said data files including at least information representing a size of one or more application programs available for downloading onto the wireless device (Col. 5 lines 42-67 - test messages and responses are exchanged, the responses may indicate the size of available programs. Note that Col. 4, lines 45-55, discusses the alternate embodiment of remotely stored application programs.);

receiving user input of one or more selected application programs to download (Col. 5 lines 4-10);

displaying an estimate of time to download the selected application programs from the server (Col. 6 lines 1-2);

providing an output of the estimated time (Col. 6 lines 1-2);

during the exchanging, measuring one or more data transfer rates (Col. 5 lines 42-63);

utilizing the one or more measured data transfer rates and the size of the selected one or more application programs to estimate a length of time required to download the one or more application programs onto the wireless device (Col. 5 lines 42-67);

Barrett does not explicitly disclose notifying the server immediately upon completion of the downloading of each of the one or more data files sent from the server; and one or more servers for measuring the data transfer rates during the exchanging and determining and sending the estimate time length required to download the one or more application programs.



Tokunaga teaches a server can send exchange data files with a receiving device and can measure a data transfer rate for the exchanging operation (Col. 14 line 53 - Col. 15 line 19). This is done in part through the device notifying the server immediately upon completion of the downloading of the data file sent from the server (Col. 15 lines 3-15).

Kraft teaches dividing the size of requested data by a data transfer rate in order to estimate a download time and subsequently send the download time estimate to the user (Col. 6 lines 56 - Col. 7 line 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Barrett and modify it as indicated by Tokunaga and Kraft such that the system further comprises notifying the server immediately upon completion of the downloading of the data file sent from the server; receiving user input of one or more selected application programs to download; receiving an estimate of time to download the selected application programs from the server; providing an output of the estimated time; one or more servers, each server programmed to perform operations over a wireless network comprising: during the exchanging, measuring one or more data transfer rates; utilizing the one or more measured data transfer rates and the size of the selected one or more application programs to estimate a length of time required to download the one or more application programs onto the wireless device; and sending the time estimate to the wireless device. One would be motivated to have this, as it is desirable to provide an indication of download time to the user (In Barrett: Col. 3 lines 48-60). Furthermore, Barrett

describes download times are influenced by the amount of traffic between a user and remote server (Col. 5 lines 38-41) and Tokunaga provides a more accurate measurement of such influence (Col. 15 lines 16-19).

26. With respect to Claim 21, Barrett in view of Tokunaga and Kraft teaches all the limitations of Claim 20 and further teaches the wireless device sending one or more requests to the server to obtain the data files from the server (In Barrett: Col. 5 lines 4-23).

27. With respect to Claim 22, Barrett in view of Tokunaga and Kraft teaches all the limitations of Claim 20 and further teaches, the exchanging operation comprising operations of: the server initiating a transmission of the data files to the wireless device (In Tokunaga: Col. 14 line 53 - Col. 15 line 19).

28. With respect to Claim 23, Barrett in view of Tokunaga and Kraft teaches all the limitations of Claim 20 and further teaches the operation of during the exchanging the server calculating one or more data transfer rates further comprising operations of: the server dividing a size of each of the one or more data files by a length of time between the server sending each data file to the wireless device, and the wireless device notifying the server of the completed download (In Tokunaga: Col. 14 line 53 - Col. 15 line 19).

29.

30. Claims 28, 29, 32-38 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokunaga in view of Kraft and Barrett.

31. With respect to Claim 28, Tokunaga teaches

receiving a data file having a size of the data file (Col. 14 line 53 - Col. 15 line 19);

measuring, at a servers a length of time required to receive the data file (Col. 14 line 53 - Col. 15 line 19);

calculating a data transfer rate of the data tile using the size of the data file and the measured length of time required to receive the data file (Col. 14 line 53 - Col. 15 line 19).

Tokunaga does not explicitly disclose receiving the size of the download file; and estimating the length of time to download the download file using the calculated data transfer rate and the received size of the download file. Kraft teaches the size of a requested download file and data transfer rate is used to estimate the length of time to download the download file (Col. 6 lines 56 - Col. 7 line 24). Barrett teaches receiving the size of a download file, as it is influential on the download time (Col. 5 lines 64-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga and modify it as indicated by Kraft such that a method for estimating a length of time required to download a download file onto a wireless device, comprising the steps of: receiving a data file having a size of the data file; measuring at a server, a length of time required to receive the data file; calculating a data transfer rate of the data tile using the size of the data file and the measured length of time required to receive the data file; receiving the size of the download file; and estimating the length of time to download the download

file using the calculated data transfer rate and the received size of the download file.

One would be motivated to have this as it is advantageous to inform the user of a estimated download time (In Kraft: Col. 7 lines 17-30).

32. With respect to Claim 29, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28 and further teaches the size of the download file is contained in a data file (Col. 5 lines 64-67).

33. With respect to Claim 32, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28, wherein the data transfer rate is calculated by a server (In Tokunaga (Col. 14 line 53 - Col. 15 line 19).

34. With respect to Claim 33, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28, wherein the data transfer rate is calculated by the wireless device (In Barrett: Col. 5 lines 42-63).

35. With respect to Claim 34, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28, receiving one or more second data files, each containing an associated size field, wherein each associated size field indicates the size of the data tile to which it is associated; measuring a length of time required to receive each of the one or more data files; and calculating a second data transfer rate using the data transfer rate and the size of each of the received one or more second data files and the length of time required to receive each of the one or more second data files (Col. 14 line 53 - Col. 15 line 19).

36. With respect to Claim 35, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 34, but does not explicitly disclose the step of calculating the second

data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. However, the examiner takes official notice that calculating the average of a data set is a well known mathematical analysis technique.

As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it such that it further comprises the step of calculating the second data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. One would be motivated to use averaging as it is a well known analysis technique.

37. With respect to Claim 36, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 34, but does not explicitly disclose the step of calculating the second data transfer rate is time weighted based on a when the data file and the one or more second data files were received. However, the examiner takes official notice that calculating the time weighted average of a data set is a well known mathematical analysis technique.

As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it such that it further comprises the step of calculating the second data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. One would be motivated to using weighted averaging as it is a well known analysis technique.

Art Unit: 2155

38. With respect to Claim 37, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28, wherein the download file is an application (In Barrett: Col. 4 lines 45-55).

39. With respect to Claims 38, 44 and 45, Tokunaga teaches  
receiving one or more data files, each containing an associated size field,  
wherein each associated size field indicates the size of the data file to which it is  
associated (Col. 14 line 53 - Col. 15 line 19);

measuring at a server a length of time required to receive each of the one or  
more data files (Col. 14 line 53 - Col. 15 line 19);

calculating a data transfer rate for each of the one or more data files using the  
size of each of the one or more data files and the measured length of time required to  
receive each of the one or more data files (Col. 14 line 53 - Col. 15 line 19);

calculating a combined data transfer rate using the data transfer rate of each of  
the one or more data files (Col. 14 line 53 - Col. 15 line 19).

Tokunaga does not explicitly disclose one data file contains the size of the  
download file and estimating the length of time to download the download file using the  
combined data transfer rate and the received size of the download file. Kraft teaches  
the size of a requested download file and data transfer rate is used to estimate the  
length of time to download the download file (Col. 6 lines 56 - Col. 7 line 24). Barrett  
teaches receiving the size of a download file; as it is influential on the download time  
(Col. 5 lines 64-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Tokunaga and modify them as indicated by Kraft and Barrett such that the method/computer readable medium/system further comprise receiving one or more data files, each containing an associated size field, wherein each associated size field indicates the size of the data file to which it is associated and one data file contains the size of the download file estimating the length of time to download the download file using the combined data transfer rate and the received size of the download file. One would be motivated to have this as it is advantageous to inform the user of a estimated download time (In Kraft: Col. 7 lines 17-30).

40. With respect to Claim 40, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 38, wherein the data transfer rate is calculated by a server (In Tokunaga (Col. 14 line 53 - Col. 15 line 19).

41. With respect to Claim 41, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 38, wherein the data transfer rate is calculated by the wireless device (In Barrett: Col. 5 lines 42-63).

42. With respect to Claim 42, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 38, but does not explicitly disclose the step of calculating the second data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. However, the examiner takes official notice that calculating the average of a data set is a well known mathematical analysis technique.

As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it such that it further comprises the step of calculating the second data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. One would be motivated to use averaging as it is a well known analysis technique.

43. With respect to Claim 43, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 38, but does not explicitly disclose the step of calculating the second data transfer rate is time weighted based on a when the data file and the one or more second data files were received. However, the examiner takes official notice that calculating the time weighted average of a data set is a well known mathematical analysis technique.

As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it such that it further comprises the step of calculating the second data transfer rate is an averaged based on the data transfer rates of the data file and the one or more second data files. One would be motivated to using weighted averaging as it is a well known analysis technique.

44. Claims 30, 31 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokunaga in view of Kraft and Barrett and U.S. Patent 6,738,804 by Lo (Lo).



Art Unit: 2155

45. With respect to Claim, 30 Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 28 but does not explicitly disclose the step of displaying a download gauge on the wireless device indicating the length of time to download the download file. Lo teaches that download progress indicators are well known in the art (Col. 13 lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it as indicated by Lo such that the method further comprises the step of displaying a download gauge on the wireless device indicating the length of time to download the download file. One would be motivated to have this, as it is advantageous to give the user an indication of the download time (In Kraft: Col. 7 lines 17-30).

46. With respect to Claim 31, Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 30 and further teaches the download gauge is updated to indicate progress of downloading the download file (In Lo: Col. 13 lines 19-23).

47. With respect to Claim, 39 Tokunaga in view of Kraft and Barrett teaches all the limitations of Claim 38 but does not explicitly disclose the step of displaying a download gauge on the wireless device indicating the length of time to download the download file; and updating the download gauge on the display to indicate a progress of downloading the download file. Lo teaches that download progress indicators that update the progress are well known in the art (Col. 13 lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tokunaga in view of Kraft and Barrett and modify it as indicated by Lo such that the method further comprises the step of displaying a download gauge on the wireless device indicating the length of time to download the download file. One would be motivated to have this, as it is advantageous to give the user an indication of the download time (In Kraft: Col. 7 lines 17-30).

### ***Conclusion***

48. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

49. U.S. Patent 5,724,514 by Arias "System, method and apparatus for controlling the transfer of data objects over a communications link" March 3, 1998. Discloses transfer rate as a function of time and data object size.

50. U.S. Patent 6,223,221 by Kunz "System and method for calculating the transfer rate across a communication medium using a downloaded test program and transferring data accordingly." April 24, 2001. Discloses the use of test data to calculate a transfer rate based on the size of the data and elapsed transfer time.

51. U.S. Patent 6,304,909 by Mullaly et al. "Client-controlled link processing in computer network" October 16, 2001. Discloses a server determining a download time for a requested page. Server takes into account available bandwidth at server and the size of the page or data and sends the calculated download time to the client. Does not

Art Unit: 2155

explicitly state the details of how the download time is calculated or an explicit display of the download time.

52. U.S. Patent 6,313,855 by Shuping et al. "System and method for web browsing" November 6, 2001. Discloses the display of download times in a web browsing environment including web browsing on a wireless device.

53. U.S. Patent 6,363,477 by Fletcher et al. "Method for analyzing network application flows in an encrypted environment" March 26, 2002. Discloses determining a file transfer rate can be done for the client or server perspective using the same technique of dividing the file size by the transfer time.

54. U.S. Patent 6,862,102 by Meisner et al. "Automatically preparing an image for downloading" March 1, 2005. Discloses displaying the estimated download time for several image files of different qualities. The estimated time seems based on just the modem speed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Lazaro  
December 7, 2005



**SALEH NAJJAR**  
**SUPERVISORY PATENT EXAMINER**  
**SUPERVISORY PATENT EXAMINER**